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101 Must-Know Challenging Maths Word Problems

Book 1

Based on current Primary Mathematics Syllabus

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- Encourages critical thinking
- Various problem-solving strategies revealed
- Step-by-step solutions provided

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101 Must-Know Challenging Maths Word Problems

Book 1

Joylynn Cheng
B.A., PGDE, M. Sos. Sc.

Name: _____

Class: _____

101 Must-Know Challenging Maths Word Problems Book 1

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Preface

101 Must-Know Challenging Maths Word Problems Book 1 presents word problems that test on important concepts so students can learn to apply general mathematical problem-solving strategies and heuristics confidently.

What's in this book?

This book comprises word problems often encountered by students in their tests and examinations. The questions are categorized into respective topics in accordance with the current **Primary Mathematics Syllabus**.

Solutions

Detailed step-by-step workings are included in the answer key for every question to show how a problem is solved. Diagrams and mathematical models are provided in most solutions to aid students in understanding the problem-solving processes.

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Learn to solve mathematics problems with bar models. This helps students to develop and hone creative and critical thinking skills.

The Editorial Team

Contents

Question 1

Tom has 18 oranges. Mary has 17 oranges. How many oranges do they have altogether?

They have _____ oranges altogether.

Question 2

Peter has 24 stickers. Jane has 9 stickers more than him. How many stickers do they have altogether?

They have _____ stickers altogether.

Question 3

Mr Adam has some eggs. He sells 24 eggs in the morning and 10 eggs in the afternoon. He has 25 eggs left. How many eggs does he have at first?

He has _____ eggs at first.

Question 4

There are 8 boys and 6 girls in class A and 12 students in class B. How many students are there in the two classes?

There are _____ students in the two classes.

Question 5

Peter has some paperclips. He uses 15 of them and gives 6 paperclips to his sister. He has 17 paperclips left. How many paperclips does he have at first?

He has _____ paperclips at first.

Question 6

Tom has 28 balloons. Jim has 23 balloons more than him. How many balloons do they have altogether?

They have _____ balloons altogether.

Question 7

Ann has some apples. She sells 28 apples and has 15 apples left. How many apples does she have at first?

She has _____ apples at first.

Question 8

John buys 21 yellow paperclips and 10 more green paperclips than yellow paperclips. Sean buys 15 paperclips more than John. How many paperclips does Sean buy?

Sean buys _____ paperclips.

Question 9

There are 11 green balls in a basket. Peter puts 15 orange balls and 21 purple balls into the basket. How many balls are there in the basket altogether?

There are _____ balls in the basket altogether.

Question 10

A florist sells 26 orchids, 32 carnations and 18 roses. How many flowers does she sell altogether?

She sells _____ flowers altogether.

Question 11

There are 9 apples in a basket. Another 12 red apples and 16 green apples are put into the basket. How many apples are there altogether?

There are _____ apples altogether.

Question 12

Jack sells 24 charity tickets. He sells 17 charity tickets fewer than Mary. How many charity tickets do they sell altogether?

They sell _____ charity tickets altogether.

Question 13

A shirt costs $41. A pair of pants costs $12 more than the shirt. How much do the shirt and the pair of pants cost altogether?

The shirt and the pair of pants cost $_____ altogether.

Question 14

A magazine costs $5 more than a book. The magazine costs $9. What is the cost of 3 such books?

The cost of 3 such books is $ _____.

Question 15

Jack has 26 balloons. Linda has 55 balloons. How many more balloons must Jack buy so that he will have the same number of balloons as Linda?

Jack must buy_____ more balloons.

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Question 16

When a number is subtracted from another, the answer is 12. If the bigger number is 17, what is the smaller number?

The smaller number is _____

Question 17

Mr Cook buys 17 tickets for a concert. He gives 5 tickets to his friends and uses the rest of the tickets to take his family to the concert. How many people are there in Mr Cook's family?

There are _____ people in Mr Cook's family.

Question 18

Alice has 23 stamps. She gives her mother 15 stamps. How many stamps does she have in the end?

She has _____ stamps in the end.

Question 19

13 more than a number is 38. What is the number?

The number is _____.

Question 20

There are 72 people at a party. 20 of them are children and the rest are adults. How many more adults than children are there?

There are _____ more adults than children.

Question 21

There are 38 soldiers in a field. 15 of them wear green uniforms and the rest wear brown uniforms. How many more soldiers wear brown uniforms than green uniforms?

_____ more soldiers wear brown uniforms than green uniforms.

Question 22

When two numbers are added together, the answer is 30. If one of the numbers is 12, what is the other number?

The other number is _____.

Question 23

A watch and a clock cost $68 at a sale. The watch costs $39. How much more does the watch cost than the clock?

The watch costs $ _____ more than the clock.

Question 24

Jim has $80. Linda has $36. How much more money does Jim have than Linda?

Jim has $ _____ more than Linda.

Question 25

Mary buys a toaster for $38. She gives the cashier $50. How much change does she get?

She gets $_____ in change.

Question 26

Tim has $95. He spends $26 and saves the rest of his money. How much does he save?

He saves $_____.

Question 27

There are 8 boy scouts in a group. Each boy scout has 3 badges. How many badges do they have altogether?

They have _____ badges altogether.

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Question 28

Peter drinks 2 glasses of milk a day. How many glasses of milk does he drink in a week?

He drinks _____ glasses of milk in a week.

Question 29

Alice puts 8 stamps on every page of her stamp album. There are 5 pages in her album. How many stamps does she have altogether?

She has _____ stamps altogether.

Question 30

There are 6 flowers in a bouquet. Betty buys 3 such bouquets. How many flowers does she buy altogether?

She buys _____ flowers altogether.

Question 31

Mrs Wood bakes 18 cakes. She puts them equally into 3 boxes. How many cakes are there in each box?

There are _____ cakes in each box.

Question 32

Andrew reads 4 pages of a book a day. How many days will he take to finish reading a 32-page book?

He will take _____ days to finish reading a 32-page book.

Question 33

Mr Cook buys a dozen eggs. He puts them equally into 4 bags. How many eggs are there in each bag?

There are _____ eggs in each bag.

Question 34

A packet of tomatoes costs $2. Mrs Fay has $10. How many packets of tomatoes can she buy with all her money?

She can buy _____ packets of tomatoes with all her money.

Question 35

Mrs Drew buys 30 sweets. She gives 12 sweets to her daughter and 15 sweets to her son. How many sweets has she left?

She has _____ sweets left.

Question 36

There are 22 flowers in a vase. 9 of them are red, 6 are yellow and the rest are pink. How many pink flowers are there in the vase?

There are _____ pink flowers in the vase.

Question 37

Mrs Jones bakes 35 cookies. There are 8 butter cookies, some chocolate chip cookies and 12 coconut cookies. How many chocolate chip cookies does she bake?

She bakes _____ chocolate chip cookies.

Question 38

Mrs Drew bakes 16 apple pies and 28 lemon pies on Monday. On Tuesday, she bakes 12 lemon pies. How many more lemon pies than apple pies does she bake in the end?

She bakes _____ more lemon pies than apple pies.

Question 39

There are 20 boys and 10 girls in class A. There are 18 boys and 24 girls in class B. How many fewer girls than boys are there in both classes altogether?

There are _____ fewer girls than boys altogether.

Question 40

There are 34 peanuts and 12 walnuts on a plate. After Tom has eaten some of the nuts, there are 17 nuts left. How many nuts does Tom eat?

Tom eats _____ nuts.

Question 41

Joe has some marbles. He receives 18 marbles from his father and 13 marbles from his brother. He has 40 marbles in the end. How many marbles does he have at first?

He has _____ marbles at first.

Question 42

When 12 is added to a number, the result is 2 more than 31. What is the number?

The number is _____.

Question 43

A farmer has 34 eggs. He throws away 8 rotten eggs and sells 7 eggs. He keeps the rest. How many more eggs does he keep than sell?

He keeps _____ more eggs than the number of eggs he sells.

Question 44

There are 54 pages in a book. Mary reads 13 pages on Monday and 8 pages on Tuesday. How many pages are not read yet?

_____ pages are not read yet.

Question 45

There are 18 boys and 21 girls in a field. A teacher has 31 balls. She gives each of them a ball. How many children will not have a ball?

_____ children will not have a ball.

Question 46

Peter scores 45 points in a game. Alex scores 6 points fewer than him. How many points do they score altogether?

They score _____ points altogether.

Question 47

There are 26 batteries in a box. Thomas uses 7 batteries for his toy car and 12 batteries for a torch. How many batteries are left in the box?

_____ batteries are left in the box.

Question 48

Jack, Anna and Tom have 70 marbles. Jack has 24 marbles. Anna has 12 marbles more than him. How many marbles does Tom have?

Tom has _____ marbles.

Question 49

There are 38 roses in a vase. 12 of them are red, 10 are pink and the rest are white. How many white roses are there?

There are _____ white roses.

Question 50

Mr Smith wants to buy 60 pieces of fruit. He buys 18 apples and 19 bananas at the market. How many more pieces of fruit does he need to buy?

He needs to buy _____ more pieces of fruit.

Question 51

There are 26 boys and 15 girls in a class. 17 children wear spectacles. How many children do not wear spectacles?

_____ children do not wear spectacles.

Question 52

Mrs Owen has 20 cookies. She gives 7 cookies each to her two friends. How many cookies has she left?

She has _____ cookies left.

Question 53

Jane has 35 stickers. She gives 12 stickers to Sam. William gives Jane 13 stickers. How many stickers does Jane have in the end?

Jane has _____ stickers in the end.

Question 54

There are 45 books on a shelf. 12 of them are English books, 7 are science books and the rest are mathematics books. How many mathematics books are there?

There are _____ mathematics books.

Question 55

There are 54 pink ribbons in a box. There are 15 fewer red ribbons than pink ribbons in the box. How many ribbons are there altogether?

There are _____ ribbons altogether.

Question 56

There are 40 fish in a tank. 16 of them are orange, 11 are red and the rest are white. How many white fish are there?

There are _____ white fish.

Question 57

There are 26 red apples and 12 green apples in box A.
There are 20 red apples and 10 green apples in box B.
How many more apples are there in box A than in box B?

There are _____ more apples in box A than in box B.

Question 58

Joel has some toy cars. His mother gives him 18 toy cars and his father gives him another 8 toy cars. He has 41 toy cars altogether. How many toy cars does he have at first?

He has _____ toy cars at first.

Question 59

Peter has $20. He spends $4 on Monday and $8 on Tuesday. How much has he left?

He has $_____ left.

Question 60

Tom has 28 toy aeroplanes. 12 of them are red, 5 are green and the rest are blue. How many more blue toy aeroplanes than green toy aeroplanes does he have?

He has _____ more blue toy aeroplanes than green toy aeroplanes.

Question 61

There are 35 adults and 28 children at a party. After 3 men and 17 girls leave the party, how many people are left at the party?

There are _____ people left.

Question 62

A dinner costs $100. Mr William pays $35, Mr Jackson pays $40 and Mr Lee pays the rest. How much does Mr Lee pay?

Mr Lee pays $ _____.

Question 63

There are 80 students in an art competition. 15 of them are in Primary 1, 12 are in Primary 2 and the rest are in Primary 3. What is the total number of Primary 1 and Primary 3 students in the competition?

The total number of Primary 1 and Primary 3 students in the competition is _____

Question 64

Ben has $30. He spends $5 on food, $9 on books and some on stationery. He has $8 left. How much does he spend on stationery?

He spends $_____ on stationery.

Question 65

John has $7. Betty has $2 more than John. Peter has $6 less than Betty. How much do they have altogether?

They have $_____ altogether.

Question 66

An apple costs 60 cents. An orange costs 20 cents less than the apple. A pear costs 40 cents more than the orange. How much does the pear cost?

The pear costs _____ cents.

Question 67

A dress costs $24. It costs $16 more than a blouse. What is the total cost of the dress and the blouse?

The total cost of the dress and the blouse is $_____.

Question 68

There are 46 orchids in a vase. There are 28 more orchids than roses in the vase. How many flowers are there altogether?

There are _____ flowers altogether.

Question 69

A photo album contains 24 photographs. Jack takes out 8 photographs and puts in 15 new ones. How many photographs are in the photo album in the end?

There are _____ photographs in the photo album in the end.

Question 70

There are 14 pink flowers and 12 red flowers in a shop. 7 flowers are sold. How many flowers are left?

There are _____ flowers left.

Question 71

There are 3 red pens and 2 blue pens in a box. How many pens are there in 5 such boxes?

There are _____ pens in 5 such boxes.

Question 72

Mrs Rice has 3 boxes of cookies. There are 5 cookies in each box. Her friend gives her another 12 cookies. How many cookies does Mrs Rice have altogether?

Mrs Rice has _____ cookies altogether.

Question 73

In a hall, there are 3 rows of children. There are 7 children in each row. Another 5 children arrive at the hall. How many children are there altogether?

There are _____ children altogether.

Question 74

There are 4 bags of oranges. Each bag has 8 oranges. There are 3 bags of apples. Each bag has 5 apples. How many pieces of fruit are there altogether?

There are _____ pieces of fruit altogether.

Question 75

Mr Baker buys some eggs. He cooks 12 of them, throws away 6 rotten ones and packs the rest into 2 bags. Each bag has 3 eggs. How many eggs does he have at first?

He has _____ eggs at first.

Question 76

There are 5 blue crayons and 6 purple crayons in a box. There are 3 boxes. How many crayons are there altogether?

There are _____ crayons altogether.

Question 77

Mr Bell has 18 apples. He shares the apples equally with his 2 friends. How many apples does each of them get?

Each of them gets _____ apples.

Question 78

Ben has 8 coins. Lucy has 4 coins. They divide their coins equally between themselves. How many coins does each of them get?

Each of them gets _____ coins.

Question 79

There are 12 chicken eggs and 6 quail eggs in a basket. All the eggs are packed equally into 3 packets. How many eggs are there in each packet?

There are _____ eggs in each packet.

Question 80

2 books cost $10 and 3 pens cost $6. How much does Peter spend if he buys a book and a pen?

Peter spends $_____ if he buys a book and a pen.

Question 81

There are 11 children in a room. 3 of them do not have hats. The rest of the children have 2 hats each. How many hats do they have altogether?

They have _____ hats altogether.

Question 82

Janet buys 4 packets of balloons. There are 5 balloons in each packet. She uses 2 packets. How many balloons has she left?

She has _____ balloons left.

Question 83

Mary has $15. She buys a chocolate cake and has $7 left. How much do 2 such chocolate cakes cost?

2 such chocolate cakes cost $ _____.

Question 84

Mr Brown has 4 bags. There are 9 oranges in each bag. He gives 15 oranges to his friend. How many oranges has he left?

He has _____ oranges left.

Question 85

A stalk of rose costs $5. A florist sells 3 stalks of roses and some stalks of orchids. She collects $27. How much money does she collect from selling the orchids?

She collects $ _____ from selling the orchids.

Question 86

2 chairs and a table cost $50. A chair costs $8. What is the cost of the table?

The cost of the table is $ _____.

Question 87

4 children have 5 buns each. Each child eats 2 buns. How many buns are there left?

There are _____ buns left.

Question 88

Mrs Taylor has 10 boxes of egg tarts. There are 4 egg tarts in a box. She gives 6 boxes of egg tarts to her friends. How many egg tarts has Mrs Taylor left?

Mrs Taylor has _____ egg tarts left.

Question 89

There are 7 bunches of balloons. Each bunch has 3 balloons. 15 of the balloons are green and the rest are blue. How many blue balloons are there?

There are _____ blue balloons.

Question 90

A pencil costs 90 cents. An eraser costs 60 cents less. Jim wants to buy 3 erasers. How much does he have to pay?

He has to pay _____ cents for 3 erasers.

Question 91

Peter has $20. He buys a vase for $11. The cashier gives him a five-dollar note and some two-dollar notes in change. How many two-dollar notes does the cashier give him?

The cashier gives him _____ two-dollar notes.

Question 92

Alice packs 12 buns equally into 3 bags. In each bag, there are 1 raisin bun and some butter buns. How many butter buns are there in each bag?

There are _____ butter buns in each bag.

Question 93

Mary has 12 apples. George has 6 apples. How many apples must Mary give to George so that they have an equal number of apples?

Mary must give George _____ apples.

Question 94

Daniel has 40 stickers. Kate has 22 stickers. How many stickers must Daniel give to Kate so that they have equal number of stickers?

He must give Kate _____ stickers.

Question 95

Peter has 90 cents in his wallet. He has 5 ten-cent coins and some twenty-cent coins. How many twenty-cent coins does he have?

He has _____ twenty-cent coins.

Question 96

There are 20 marbles in a bag. Sam divides them equally into 4 groups. How many marbles are there in 2 such groups?

There are _____ marbles in 2 such groups.

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Question 97

There are 6 oranges in a bag. A bag of oranges costs $3. Mrs Cook has $15. How many oranges can she buy altogether?

She can buy _____ oranges altogether.

Question 98

Mrs Scoff has some cookies. She buys 15 cookies. She has 65 cookies in the end.

(a) How many cookies does she have at first?

(b) How many cookies does she have altogether if she buys another 25 cookies?

(a) She has _____ cookies at first.

(b) She has _____ cookies altogether.

Question 99

Mr Adam spends $70 on a belt and saves the rest of his money. If he saves $12,

(a) how much more does he spend than save?

(b) how much money does he have at first?

(a) He spends $ _____ more than he saves.

(b) He has $ _____ at first.

Question 100

A plate costs $8 more than a bowl. If the plate costs $23,

(a) how much does the bowl cost?

(b) what is the total cost of the plate and the bowl?

(a) The bowl costs $_____.

(b) The total cost of the plate and the bowl is $_____.

Question 101

There are 40 chickens and 13 ducks on a farm. The farmer buys another 14 chickens.

(a) How many more chickens than ducks are there on the farm?

(b) How many chickens and ducks are there altogether?

(a) There are _____ more chickens than ducks on the farm.

(b) There are _____ chickens and ducks altogether.

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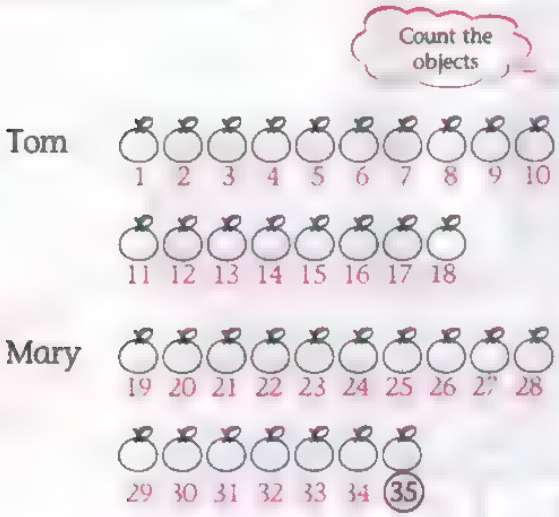
Book 1

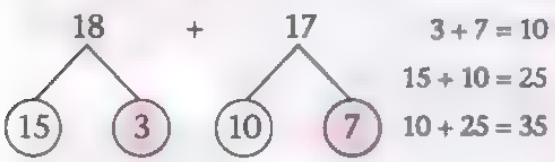
Solutions

Solution to Question 1

Method 1 :
Draw diagrams and count the total number of oranges



Method 2 :
Use number bonds to find the total number of oranges

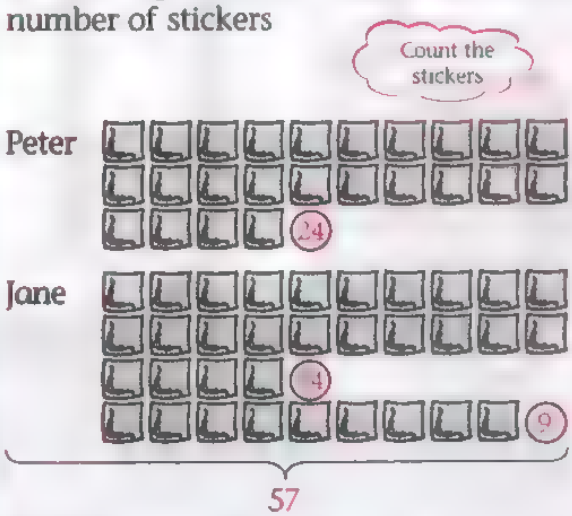


18	+	17	=	35

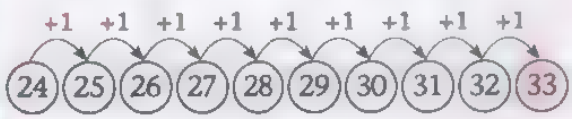
They have 35 oranges altogether.

Solution to Question 2

Method 1 :
Draw diagrams and count the total number of stickers

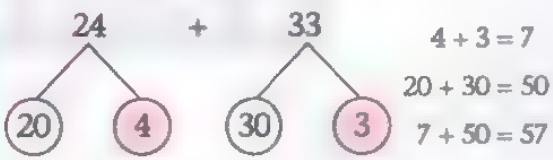


Method 2 :
Step 1 : Use 'counting on' method to find the number of stickers Jane has



24	+	9	=	33

Step 2 : Use number bonds to find the number of stickers they have altogether

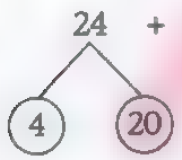


24	+	33	=	57

They have 57 stickers altogether.

Solution to Question 3

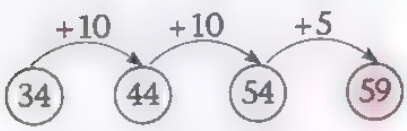
Step 1 : Use number bonds to find the total number of eggs he has sold



10 + 20 = 30
30 + 4 = 34

24	+	10	=	34

Step 2 : Use 'counting on' method to find the number of eggs he has at first



34	+	25	=	59

He has 59 eggs at first.

Solution to Question 4

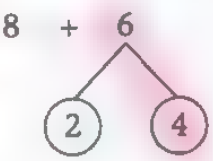
Method 1 :
Draw diagrams and count the number of students

Class A

Class B

Method 2 :

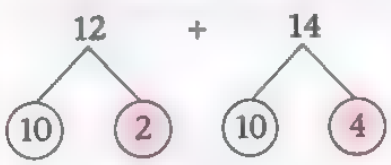
Step 1 : Use number bonds to find the number of students in class A



8 + 2 = 10
10 + 4 = 14

8	+	6	=	14

Step 2 : Use number bonds to find the number of students in the two classes



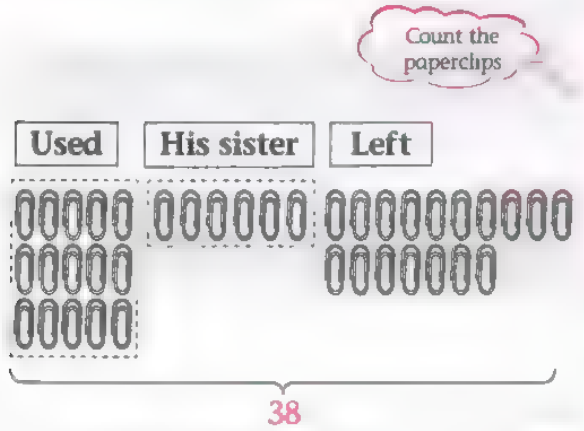
2 + 4 = 6
10 + 10 = 20
6 + 20 = 26

12	+	14	=	26

There are 26 students in the two classes.

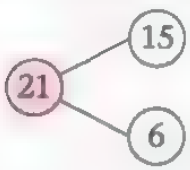
Solution to Question 5

Method 1 :
Draw diagrams and count the total number of paperclips



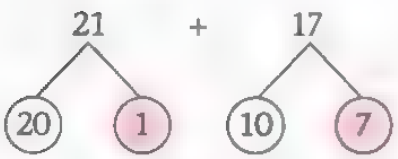
Method 2 :

Step 1 : Use number bonds to find the number of paperclips he has used and given away



15 + 6 = 21

Step 2 : Use number bonds to find the number of paperclips he has at first



1 + 7 = 8
20 + 10 = 30
8 + 30 = 38

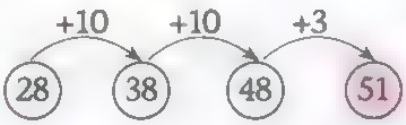
21 + 17 = 38

He has 38 paperclips at first.

Solution to Question 6

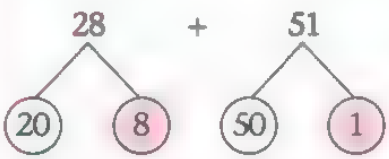
Step 1 : Draw diagrams and count the balloons

Step 2 : Use 'counting on' method to find the number of balloons Jim has



28 + 20 + 3 = 51

Step 3 : Use number bonds to find the number of balloons they have altogether



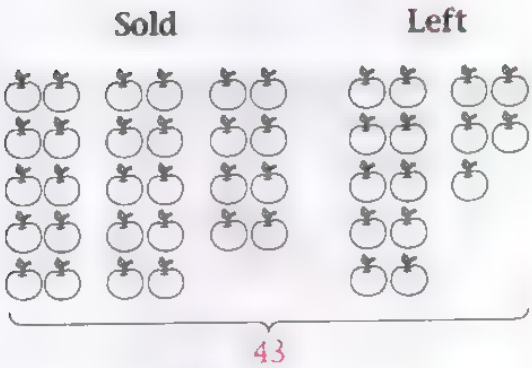
8 + 1 = 9
20 + 50 = 70
9 + 70 = 79

28 + 51 = 79

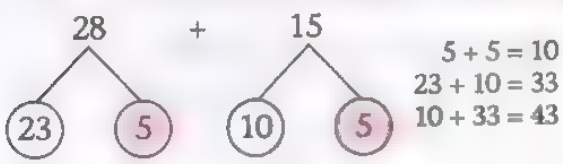
They have 79 balloons altogether.

Solution to Question 7

Method 1 :
Draw diagrams and count the total number of apples



Method 2 :
Use number bonds to find the total number of apples at first

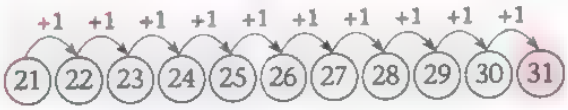


28 + 15 = 43

She has 43 apples at first.

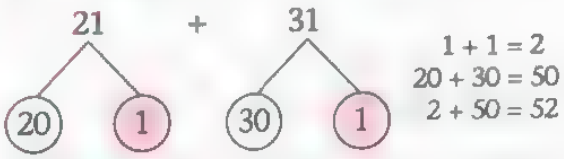
Solution to Question 8

Step 1 : Use 'counting on' method to find the number of green paperclips John has



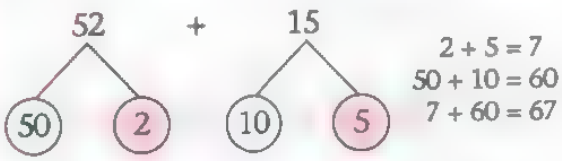
21 + 10 = 31

Step 2 : Use number bonds to find the total number of paperclips John has



21 + 31 = 52

Step 3 : Use number bonds to find the number of paperclips Sean has



52 + 15 = 67

Sean buys 67 paperclips.

Solution to Question 9

Step 1 : Use number bonds to find the total number of balls he puts into the basket

5 + 1 = 6
10 + 20 = 30
6 + 30 = 36

15 + 21 = 36

Step 2 : Use number bonds to find the total number of balls in the basket

6 + 1 = 7
30 + 10 = 40
7 + 40 = 47

36 + 11 = 47

There are 47 balls in the basket altogether.

Solution to Question 10

Step 1 : Use number bonds to find the total number of two types of flowers

6 + 2 = 8
20 + 30 = 50
8 + 50 = 58

26 + 32 = 58

Step 2 : Use number bonds to find the total number of three types of flowers

2 + 8 = 10
56 + 10 = 66
10 + 66 = 76

58 + 18 = 76

She sells 76 flowers altogether.

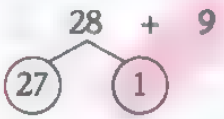
Solution to Question 11

Step 1 : Use number bonds to find the number of apples that are put into the basket

2 + 6 = 8
10 + 10 = 20
8 + 20 = 28

12 + 16 = 28

Step 2 : Use number bonds to find the total number of apples in the basket



1 + 9 = 10
10 + 27 = 37

28 + 9 = 37

There are 37 apples altogether.

Solution to Question 12

Step 1 : Use number bonds to find the number of charity tickets Mary has sold

3 + 7 = 10
21 + 10 = 31
10 + 31 = 41

24 + 17 = 41

Step 2 : Use number bonds to find the total number of charity tickets they have sold

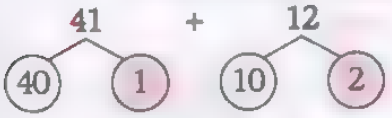
1 + 4 = 5
40 + 20 = 60
5 + 60 = 65

41 + 24 = 65

They sell 65 charity tickets altogether.

Solution to Question 13

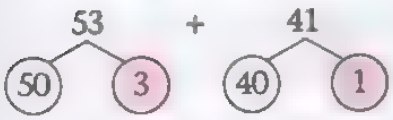
Step 1 : Use number bonds to find the cost of a pair of pants



1 + 2 = 3
40 + 10 = 50
3 + 50 = 53

40 + 12 = 53

Step 2 : Use number bonds to find the total cost of the shirt and the pair of pants



3 + 1 = 4
50 + 40 = 90
4 + 90 = 94

53 + 41 = 94

The shirt and the pair of pants cost $94 altogether.

Solution to Question 14

Step 1 : Draw diagrams to find the cost of a book

Magazine

Book

9 − 5 = 4

Step 2 : Use repeated addition to find the cost of 3 such books

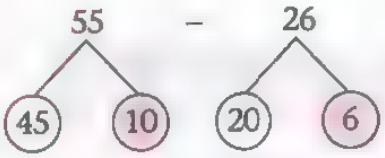
4 × 3 = 12

4 + 4 + 4 = 12

The cost of 3 such books is $12.

Solution to Question 15

Use number bonds to find how many more balloons Jack must buy



10 − 6 = 4
45 − 20 = 25
4 + 25 = 29

55 − 26 = 29

Jack must buy 29 more balloons.

Solution to Question 16

Use number bonds to find the smaller number

7 − 2 = 5
10 − 10 = 0
5 + 0 = 5

Check:
17 − 5 = 12

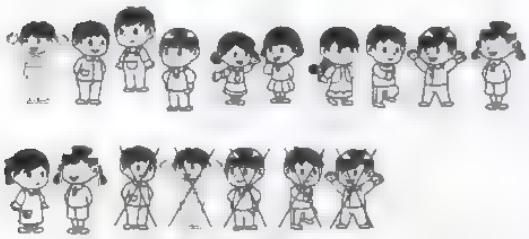
17 − 12 = 5

The smaller number is 5.

Solution to Question 17

Method 1 :

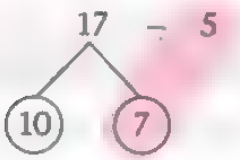
Draw diagrams and count the number of tickets left



Friends

Method 2 :

Use number bonds to find the number of people in Mr Cook's family



$7 - 5 = 2$
$10 + 2 = 12$

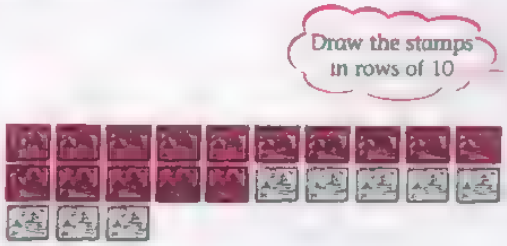
17 ⊖ 5 = 12

There are 12 people in Mr Cook's family.

Solution to Question 18

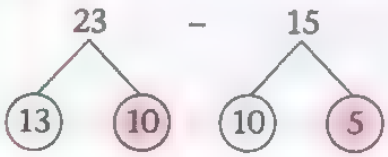
Method 1 :

Draw diagrams and count the total number of stamps



Method 2 :

Use number bonds to find the number of stamps she has in the end



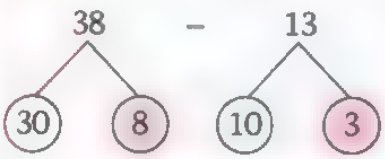
$10 - 5 = 5$
$13 - 10 = 3$
$5 + 3 = 8$

23 ⊖ 15 = 8

She has 8 stamps in the end.

Solution to Question 19

Use number bonds to find the number



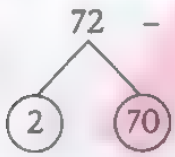
$8 - 3 = 5$
$30 - 10 = 20$
$5 + 20 = 25$

38 ⊖ 13 = 25

The number is 25.

Solution to Question 20

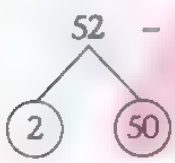
Step 1 : Use number bonds to find the number of adults



70 – 20 = 50
50 + 2 = 52

72 − 20 = 52

Step 2 : Use number bonds to find how many more adults than children there are



50 – 20 = 30
30 + 2 = 32

52 − 20 = 32

There are 32 more adults than children.

Solution to Question 21

Step 1 : Use number bonds to find the number of soldiers in brown uniforms

8 – 5 = 3
30 – 10 = 20
3 + 20 = 23

38 − 15 = 23

Step 2 : Use number bonds to find how many more soldiers wear brown uniforms than green uniforms

10 – 5 = 5
13 – 10 = 3
5 + 3 = 8

23 − 15 = 8

8 more soldiers wear brown uniforms than green uniforms.

Solution to Question 22

Step 1 : Write down the number sentence

12 + ? = 30

Step 2 : Use number bonds to find the number

10 – 2 = 8
20 – 10 = 10
8 + 10 = 18

Check:
12 + 18 = 30

30 − 12 = 18

The other number is 18.

Solution to Question 23

Step 1 : Use number bonds to find the cost of the clock

58 + 10 = 68

10 – 9 = 1
58 – 30 = 28
1 + 28 = 29

68 ⊖ 39 = 29

Step 2 : Use number bonds to find how much more the watch costs than the clock

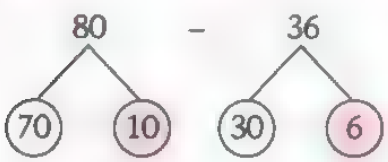
20 – 10 = 10
19 – 19 = 0
10 + 0 = 10

39 ⊖ 29 = 10

The watch costs $10 more than the clock.

Solution to Question 24

Use number bonds to find how much more money Jim has than Linda



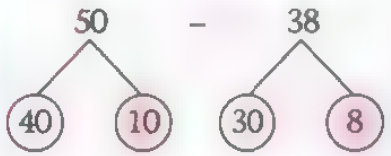
10 – 6 = 4
70 – 30 = 40
4 + 40 = 44

80 ⊖ 36 = 44

Jim has $44 more than Linda.

Solution to Question 25

Use number bonds to find the amount of change she gets



10 – 8 = 2
40 – 30 = 10
2 + 10 = 12

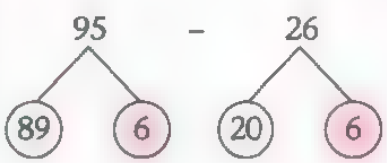
50 ⊖ 38 = 12

She gets $12 in change.

Solution to Question 26

Use number bonds to find how much money Tim saves

89 + 6 = 95



6 – 6 = 0
89 – 20 = 69
0 + 69 = 69

95 ⊖ 26 = 69

He saves $69.

Solution to Question 27

Method 1 :

Draw diagrams and count the number of badges altogether

Boy scouts

Badges

24

Method 2 :

Use repeated addition to find the number of badges

$8 \times 3 = 24$

$3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 24$

They have 24 badges altogether.

Solution to Question

Method 1 :

Draw a table and count the num
glasses of milk he drinks in a wee

1 week = 7 day

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Method 2 :

Use repeated addition to fin
number of glasses of milk he dr
a week

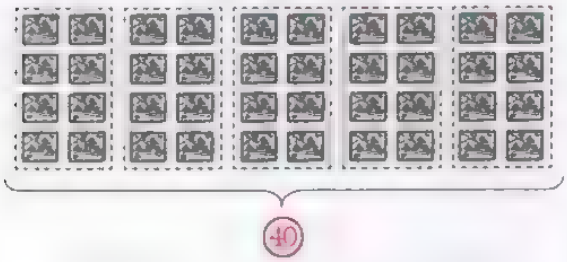
$7 \times 2 = 14$

$2 + 2 + 2 + 2 + 2 + 2 + 2$

He drinks 14 glasses of milk in a

Solution to Question 29

Method 1 :
Draw diagrams to count the total number of stamps



Method 2 :
Use repeated addition to find the total number of stamps she has

$5 \times 8 = 40$

$8 + 8 + 8 + 8 + 8 = 40$

She has 40 stamps altogether.

Solution to Question 30

Method 1 :
Draw diagrams to count the total number of flowers

Method 2 :
Use repeated addition to find the total number of flowers

$3 \times 6 = 18$

$6 + 6 + 6 = 18$

She buys 18 flowers altogether.

Solution to Question 31

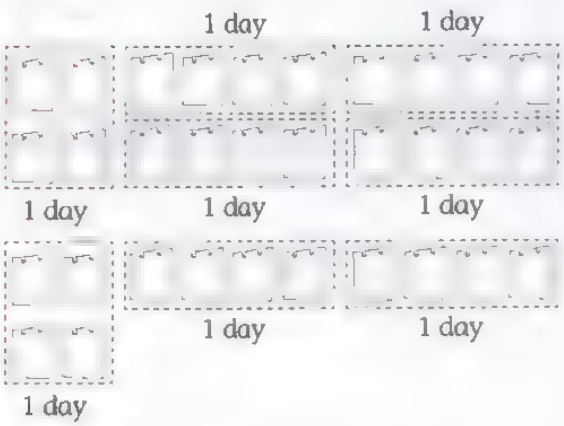
Draw diagrams and put 18 cakes into 3 equal groups

$18 \div 3 = 6$

There are 6 cakes in each box.

Solution to Question 32

Draw diagrams and put 4 pages in one group

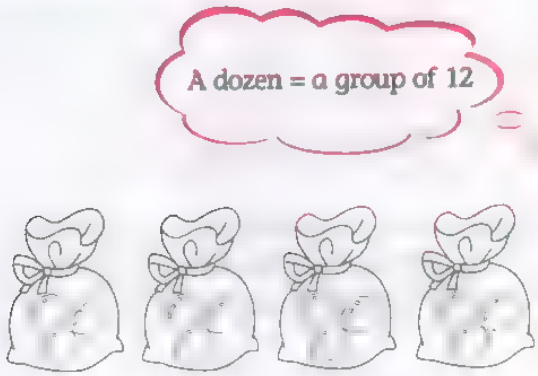


$32 \div 4 = 8$

He will take 8 days to finish reading a 32-page book.

Solution to Question 33

Draw diagrams to group the eggs into 4 bags equally

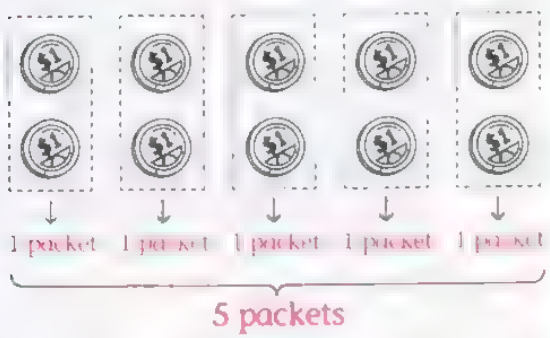


12	÷	4	=	3

There are 3 eggs in each bag.

Solution to Question 34

Draw diagrams and circle 2 one-dollar coins to represent 1 packet



$10	÷	$2	=	5

She can buy 5 packets of tomatoes with all her money.

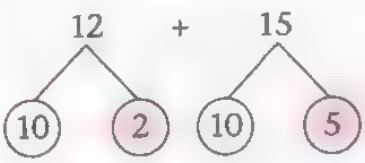
Solution to Question 35

Method 1 :

Draw diagrams and count the number of sweets left

Method 2 :

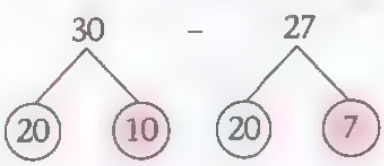
Step 1 : Use number bonds to find the number of sweets she gives away



2 + 5 = 7
10 + 10 = 20
20 + 7 = 27

12	+	15	=	27

Step 2 : Use number bonds to find the number of sweets she has left



10 – 7 = 3
20 – 20 = 0
3 + 0 = 3

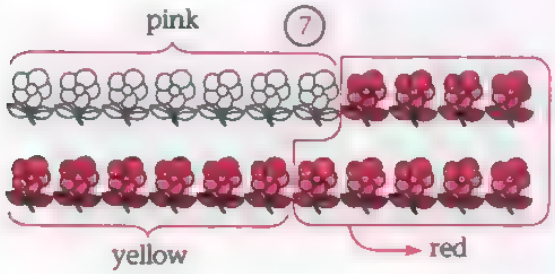
30	–	27	=	3

She has 3 sweets left.

Solution to Question 36

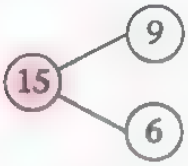
Method 1 :

Draw diagrams and group the flowers into different colours



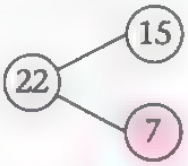
Method 2 :

Step 1 : Use number bonds to find the total number of red and yellow flowers



9 + 6 = 15

Step 2 : Use number bonds to find the number of pink flowers

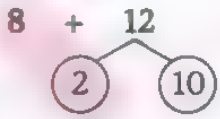


22 − 15 = 7

There are 7 pink flowers in the vase.

Solution to Question 37

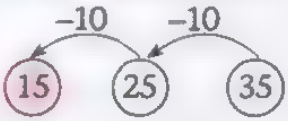
Step 1 : Use number bonds to find the number of butter and coconut cookies



8 + 2 = 10
10 + 10 = 20

8 + 12 = 20

Step 2 : Use 'counting backwards' method to find the number of chocolate chip cookies



35 − 20 = 15

She bakes 15 chocolate chip cookies.

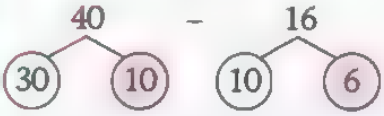
Solution to Question 38

Step 1 : Use number bonds to find the total number of lemon pies she bakes

8 + 2 = 10
20 + 10 = 30
10 + 30 = 40

28 + 12 = 40

Step 2 : Use number bonds to find how many more lemon pies than apple pies there are



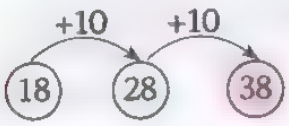
10 − 6 = 4
30 − 10 = 20
4 + 20 = 24

40 − 16 = 24

She bakes 24 more lemon pies than apple pies in the end.

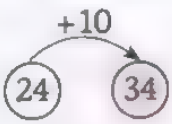
Solution to Question 39

Step 1 : Use 'counting on' method to find the total number of boys



20 + 18 = 38

Step 2 : Use 'counting on' method to find the total number of girls



10 + 24 = 34

Step 3 : Use number bonds to find how many fewer girls than boys there are

8 – 4 = 4
30 – 30 = 0
4 + 0 = 4

38 – 34 = 4

There are 4 fewer girls than boys altogether.

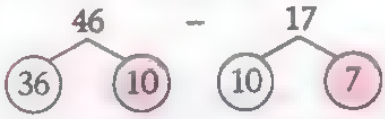
Solution to Question 40

Step 1 : Use number bonds to find the total number of nuts on the plate

4 + 2 = 6
30 + 10 = 40
6 + 40 = 46

34 + 12 = 46

Step 2 : Use number bonds to find the number of nuts Tom has eaten



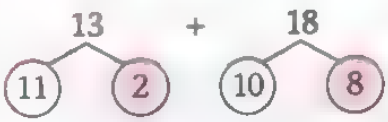
10 – 7 = 3
36 – 10 = 26
3 + 26 = 29

46 – 17 = 29

Tom eats 29 nuts.

Solution to Question 41

Step 1 : Use number bonds to find the total number of marbles he receives



2 + 8 = 10
11 + 10 = 21
10 + 21 = 31

13 + 18 = 31

Step 2 : Use number bonds to find the total number of marbles he has at first

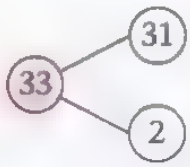
10 – 1 = 9
30 – 30 = 0
9 + 0 = 9

40 – 31 = 9

He has 9 marbles at first.

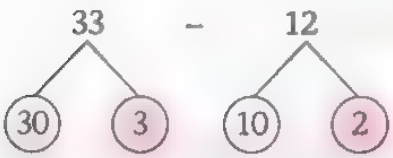
Solution to Question 42

Step 1 : Use number bonds to find the result



31	+	2	=	33

Step 2 : Use number bonds to find the number



3 – 2 = 1
30 – 10 = 20
1 + 20 = 21

Check:
12 + 21 = 33

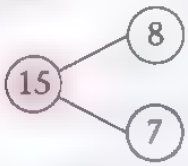
33	−	12	=	21

The number is 21.

Solution to Question 43

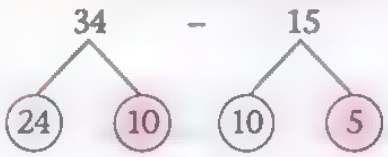
Step 1 : Draw diagrams

Step 2 : Use number bonds to find the number of eggs he has thrown and sold



8	+	7	=	15

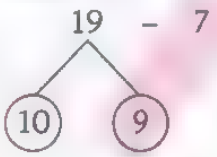
Step 3 : Use number bonds to find the number of eggs he has kept



10 – 5 = 5
24 – 10 = 14
5 + 14 = 19

34	−	15	=	19

Step 4 : Use number bonds to find how many more eggs he has kept than sold



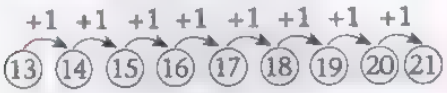
9 – 7 = 2
2 + 10 = 12

19	−	7	=	12

He keeps 12 more eggs than the number of eggs he sells.

Solution to Question 44

Step 1 : Use 'counting on' method to find the total number of pages she has read on both days



13 + 8 = 21

Step 2 : Use number bonds to find the number of pages that are not read yet

4 – 1 = 3
50 – 20 = 30
3 + 30 = 33

54 − 21 = 33

33 pages are not read yet.

Solution to Question 45

Step 1 : Use number bonds to find the total number of children

8 + 1 = 9
10 + 20 = 30
9 + 30 = 39

18 + 21 = 39

Step 2 : Use number bonds to find the number of children who will not have a ball

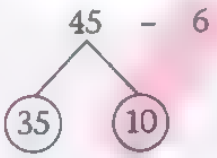
9 – 1 = 8
30 – 30 = 0
8 + 0 = 8

39 − 31 = 8

8 children will not have a ball.

Solution to Question 46

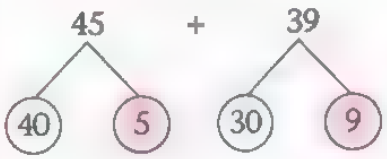
Step 1 : Use number bonds to find the points scored by Alex



10 – 6 = 4
4 + 35 = 39

45 − 6 = 39

Step 2 : Use number bonds to find the total points scored by both boys



5 + 9 = 14
40 + 30 = 70
14 + 70 = 84

45 + 39 = 84

They score 84 points altogether.

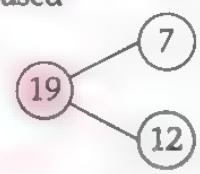
Solution to Question 47

Method 1 :

Draw diagrams to count the number of batteries left

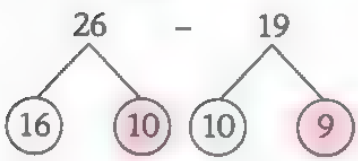
Method 2 :

Step 1 : Use number bonds to find the total number of batteries he has used



7	+	12	=	19

Step 2 : Use number bonds to find the number of batteries left in the box



$10 - 9 = 1$
$16 - 10 = 6$
$1 + 6 = 7$

26	−	19	=	7

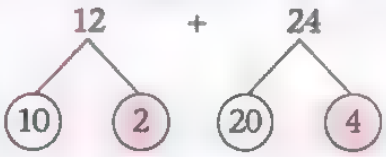
7 batteries are left in the box.

Solution to Question 48

Step 1 : Draw a table

Jack	24
Anna	12 + 24
Tom	?
Total	70

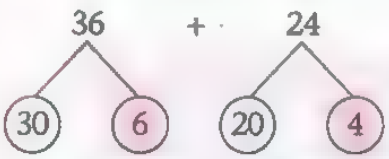
Step 2 : Use number bonds to find the number of marbles Anna has



$2 + 4 = 6$
$10 + 20 = 30$
$6 + 30 = 36$

12	+	24	=	36

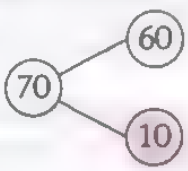
Step 3 : Use number bonds to find the number of marbles Jack and Anna have



$6 + 4 = 10$
$30 + 20 = 50$
$10 + 50 = 60$

36	+	24	=	60

Step 4 : Use number bonds to find the number of marbles Tom has

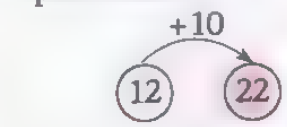


70	−	60	=	10

Tom has 10 marbles.

Solution to Question 49

Step 1 : Use 'counting on' method to find the number of red and pink roses



12	+	10	=	22

Step 2 : Use number bonds to find the number of white roses

8 – 2 = 6
30 – 20 = 10
6 + 10 = 16

38	−	22	=	16

There are 16 white roses.

Solution to Question 50

Step 1 : Use number bonds to find the number of pieces of fruit he has bought at the market

1 + 9 = 10
17 + 10 = 27
10 + 27 = 37

18	+	19	=	37

Step 2 : Use number bonds to find the number of pieces of fruit he needs to buy

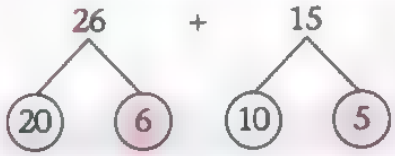
10 – 7 = 3
50 – 30 = 20
3 + 20 = 23

60	−	37	=	23

He needs to buy 23 more pieces of fruit.

Solution to Question 51

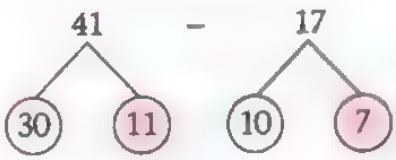
Step 1 : Use number bonds to find the number of children in the class



6 + 5 = 11
20 + 10 = 30
11 + 30 = 41

26	+	15	=	41

Step 2 : Use number bonds to find the number of children who do not wear spectacles



11 – 7 = 4
30 – 10 = 20
4 + 20 = 24

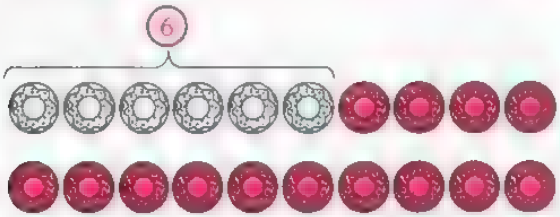
41	−	17	=	24

24 children do not wear spectacles.

Solution to Question 52

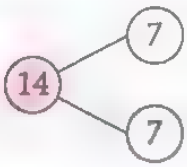
Method 1 :

Draw diagrams to find the number of cookies left



Method 2 :

Step 1 : Use number bonds to find the total number of cookies she has given away



7 + 7 = 14

Step 2 : Use number bonds to find the number of cookies she has left

10 – 4 = 6
10 – 10 = 0
6 + 0 = 6

20 – 14 = 6

She has 6 cookies left.

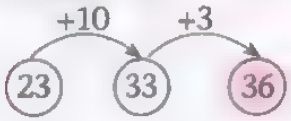
Solution to Question 53

Step 1 : Use number bonds to find the number of stickers Jane has left after giving 12 stickers to Sam

5 – 2 = 3
30 – 10 = 20
3 + 20 = 23

35 – 12 = 23

Step 2 : Use 'counting on' method to find the number of stickers Jane has after William has given her 13 stickers

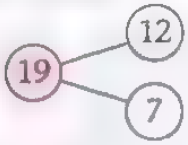


23 + 13 = 36

Jane has 36 stickers in the end.

Solution to Question 54

Step 1 : Use number bonds to find the total number of English and science books



12 + 7 = 19

Step 2 : Use number bonds to find the number of mathematics books

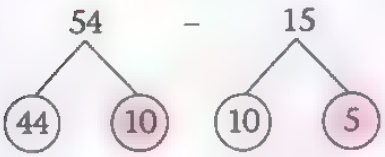
10 – 9 = 1
35 – 10 = 25
1 + 25 = 26

45 – 19 = 26

There are 26 mathematics books.

Solution to Question 55

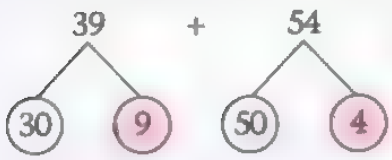
Step 1 : Use number bonds to find the number of red ribbons



10 – 5 = 5
44 – 10 = 34
5 + 34 = 39

54 ⊖ 15 = 39

Step 2 : Use number bonds to find the number of red and pink ribbons



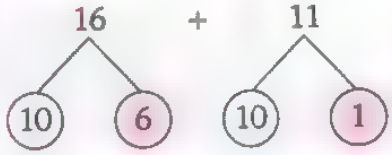
9 + 4 = 13
30 + 50 = 80
13 + 80 = 93

39 ⊕ 54 = 93

There are 93 ribbons altogether.

Solution to Question 56

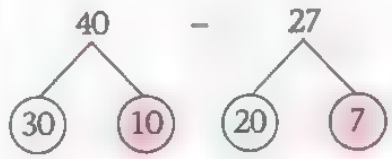
Step 1 : Use number bonds to find the number of orange and red fish



6 + 1 = 7
10 + 10 = 20
7 + 20 = 27

16 ⊕ 11 = 27

Step 2 : Use number bonds to find the number of white fish



10 – 7 = 3
30 – 20 = 10
3 + 10 = 13

40 ⊖ 27 = 13

There are 13 white fish.

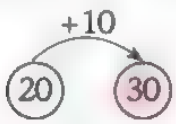
Solution to Question 57

Step 1 : Use number bonds to find the number of apples in box A

$6 + 2 = 8$
$20 + 10 = 30$
$8 + 30 = 38$

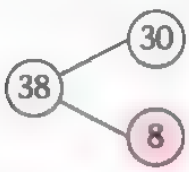
26	+	12	=	38

Step 2 : Use 'counting on' method to find the number of apples in box B



20	+	10	=	30

Step 3 : Use number bonds to find how many more apples there are in box A than in box B

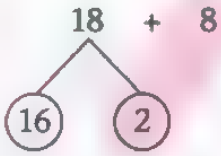


38	−	30	=	8

There are 8 more apples in box A than in box B.

Solution to Question 58

Step 1 : Use number bonds to find the total number of toy cars given to him



$2 + 8 = 10$
$10 + 16 = 26$

18	+	8	=	26

Step 2 : Use number bonds to find the number of toy cars he has at first

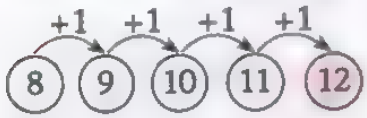
$10 - 6 = 4$
$31 - 20 = 11$
$4 + 11 = 15$

41	−	26	=	15

He has 15 toy cars at first.

Solution to Question 59

Step 1 : Use 'counting on' method to find the amount of money he has spent on both days



8 (+) 4 = 12

Step 2 : Use number bonds to find the amount of money he has left

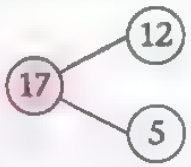
10 – 2 = 8
10 – 10 = 0
8 + 0 = 8

20 (−) 12 = 8

He has $8 left.

Solution to Question 60

Step 1 : Use number bonds to find the total number of red and green toy aeroplanes



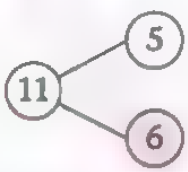
12 (+) 5 = 17

Step 2 : Use number bonds to find the number of blue toy aeroplanes

8 – 7 = 1
20 – 10 = 10
1 + 10 = 11

28 (−) 17 = 11

Step 3 : Use number bonds to find how many more blue toy aeroplanes than green toy aeroplanes he has

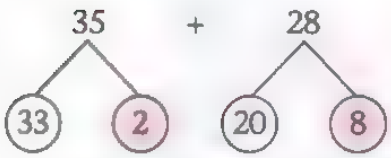


11 (−) 5 = 6

He has 6 more blue toy aeroplanes than green toy aeroplanes.

Solution to Question 61

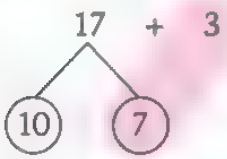
Step 1 : Use number bonds to find the total number of people at the party



2 + 8 = 10
33 + 20 = 53
10 + 53 = 63

35 (+) 28 = 63

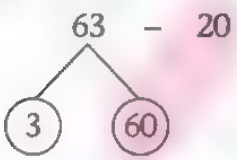
Step 2 : Use number bonds to find the number of people who left the party



7 + 3 = 10
10 + 10 = 20

17 (+) 3 = 20

Step 3 : Use number bonds to find the number of people left at the party



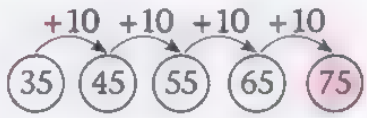
60 – 20 = 40
40 + 3 = 43

63 (–) 20 = 43

There are 43 people left.

Solution to Question 62

Step 1 : Use 'counting on' method to find the total amount of money paid by Mr William and Mr Jackson



35 (+) 40 = 75

Step 2 : Use number bonds to find the amount of money paid by Mr Lee

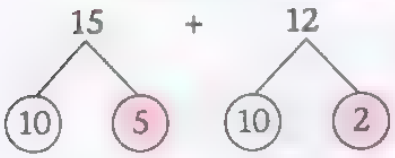
10 – 5 = 5
90 – 70 = 20
5 + 20 = 25

100 (–) 75 = 25

Mr Lee pays $25.

Solution to Question 63

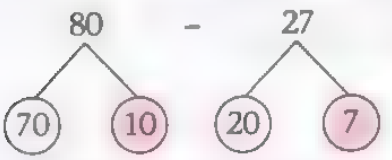
Step 1 : Use number bonds to find the total number of Primary 1 and Primary 2 students



$5 + 2 = 7$
$10 + 10 = 20$
$7 + 20 = 27$

15 + 12 = 27

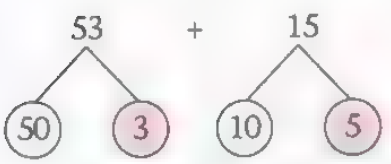
Step 2 : Use number bonds to find the number of Primary 3 students



$10 - 7 = 3$
$70 - 20 = 50$
$3 + 50 = 53$

80 − 27 = 53

Step 3 : Use number bonds to find the total number of Primary 1 and Primary 3 students



$3 + 5 = 8$
$50 + 10 = 60$
$8 + 60 = 68$

53 + 15 = 68

The total number of Primary 1 and Primary 3 students in the competition is 68.

Solution to Question 64

Step 1 : Add the total amount of money spent and left

5 + 9 + 8 = 22

Step 2 : Use number bonds to find the amount of money he has spent on stationery

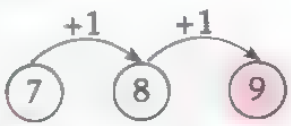
$10 - 2 = 8$
$20 - 20 = 0$
$8 + 0 = 8$

30 − 22 = 8

He spends $8 on stationery.

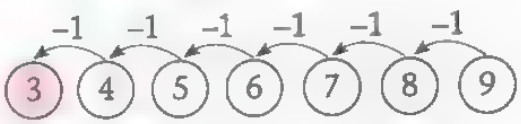
Solution to Question 65

Step 1 : Use 'counting on' method to find the amount of money Betty has



7 + 2 = 9

Step 2 : Use 'counting backwards' method to find the amount of money Peter has



9 − 6 = 3

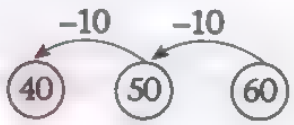
Step 3 : Add the amount of money they have altogether

7 + 9 + 3 = 19

They have $19 altogether.

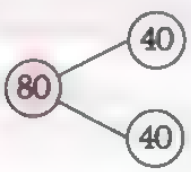
Solution to Question 66

Step 1 : Use 'counting backwards' method to find the cost of the orange



60 − 20 = 40

Step 2 : Use number bonds to find the cost of the pear

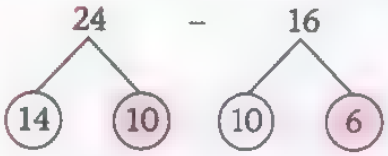


40 + 40 = 80

The pear costs 80 cents.

Solution to Question 67

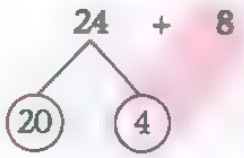
Step 1 : Use number bonds to find the cost of the blouse



10 – 6 = 4
14 – 10 = 4
4 + 4 = 8

24 − 16 = 8

Step 2 : Find the total cost of the dress and the blouse



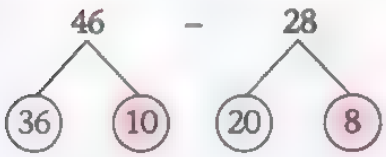
4 + 8 = 12
+ 20 = 32

24 + 8 = 32

The total cost of the dress and the blouse is $32.

Solution to Question 68

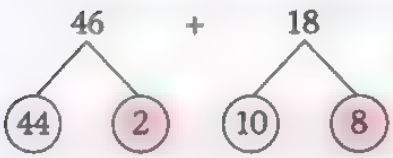
Step 1 : Use number bonds to find the number of roses



$10 - 8 = 2$
$36 - 20 = 16$
$2 + 16 = 18$

46 − 28 = 18

Step 2 : Use number bonds to find the total number of flowers



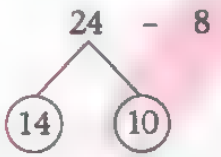
$2 + 8 = 10$
$44 + 10 = 54$
$10 + 54 = 64$

46 + 18 = 64

There are 64 flowers altogether.

Solution to Question 69

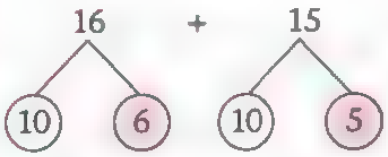
Step 1 : Use number bonds to find the number of photographs in the album after 8 photographs are taken out



$10 - 8 = 2$
$2 + 14 = 16$

24 − 8 = 16

Step 2 : Use number bonds to find the number of photographs in the album after 15 new photographs are put in



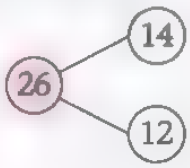
$6 + 5 = 11$
$10 + 10 = 20$
$20 + 11 = 31$

16 + 15 = 31

There are 31 photographs in the photo album in the end.

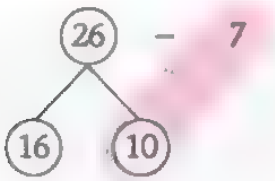
Solution to Question 70

Step 1 : Use number bonds to find the total number of flowers



14 + 12 = 26

Step 2 : Use number bonds to find the number of flowers left



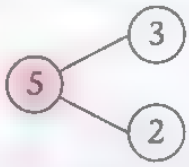
10 – 7 = 3
3 + 16 = 19

26 – 7 = 19

There are 19 flowers left.

Solution to Question 71

Step 1 : Use number bonds to find the number of pens in a box



3 + 2 = 5

Step 2 : Use repeated addition to find the number of pens in 5 boxes

5 × 5 = 25

5 + 5 + 5 + 5 + 5 = 25

There are 25 pens in 5 such boxes.

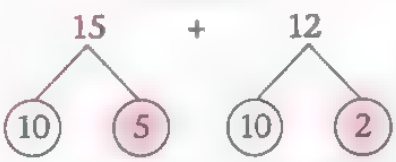
Solution to Question 72

Step 1 : Use repeated addition to find the number of cookies in 3 boxes

3 × 5 = 15

5 + 5 + 5 = 15

Step 2 : Use number bonds to find the number of cookies she has altogether



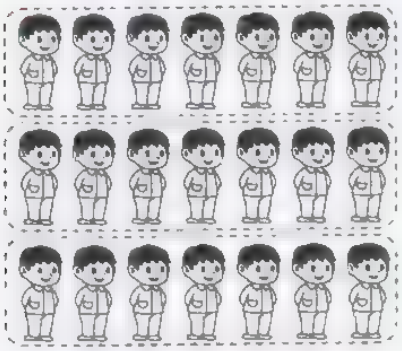
5 + 2 = 7
10 + 10 = 20
7 + 20 = 27

15 + 12 = 27

Mrs Rice has 27 cookies altogether.

Solution to Question 73

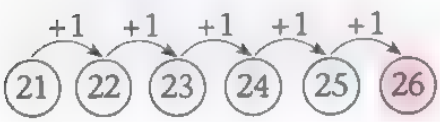
Step 1 : Draw diagrams and use repeated addition to find the total number of children in 3 rows



$3 \times 7 = 21$

$7 + 7 + 7 = 21$

Step 2 : Use 'counting on' method to find the total number of children after 5 more children arrived at the hall

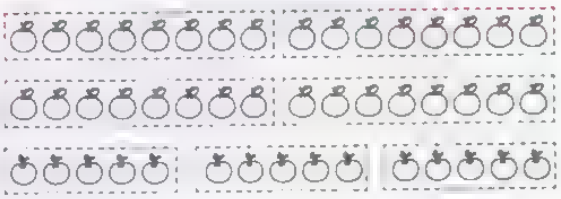


$21 + 5 = 26$

There are 26 children altogether.

Solution to Question 74

Step 1 : Draw diagrams



Step 2 : Use repeated addition to find the total number of oranges

$4 \times 8 = 32$

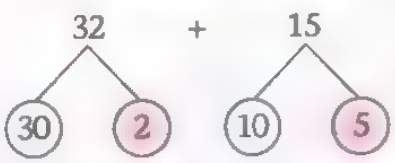
$8 + 8 + 8 + 8 = 32$

Step 3 : Use repeated addition to find the total number of apples

$3 \times 5 = 15$

$5 + 5 + 5 = 15$

Step 4 : Use number bonds to find the total number of pieces of fruit



$2 + 5 = 7$
$30 + 10 = 40$
$7 + 40 = 47$

$32 + 15 = 47$

There are 47 pieces of fruit altogether.

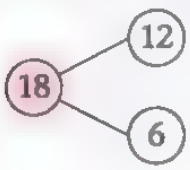
Solution to Question 75

Step 1 : Use repeated addition to find the number of eggs in 2 bags

$2 \times 3 = 6$

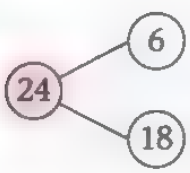
$3 + 3 = 6$

Step 2 : Use number bonds to find the number of eggs that he has cooked and thrown away



$12 + 6 = 18$

Step 3 : Use number bonds to find the total number of eggs he has at first

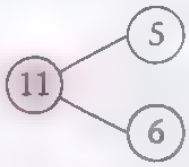


$6 + 18 = 24$

He has 24 eggs at first.

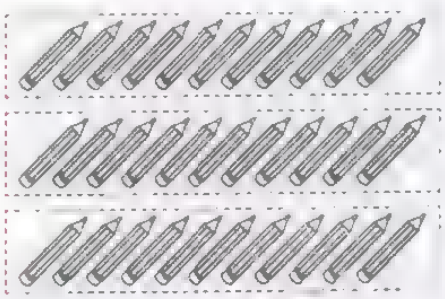
Solution to Question 76

Step 1 : Use number bonds to find the number of crayons in a box



$5 + 6 = 11$

Step 2 : Draw diagrams



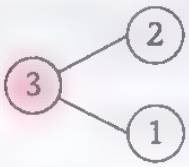
$3 \times 11 = 33$

$11 + 11 + 11 = 33$

There are 33 crayons altogether.

Solution to Question 77

Step 1 : Use number bonds to find the total number of people sharing the apples



2 + 1 = 3

Step 2 : Draw a table to group the apples into 3 sets

Mr Bell	Friend 1	Friend 2

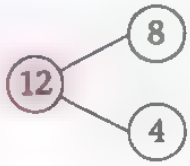
3 groups of 6 = 18

18 ÷ 3 = 6

Each of them gets 6 apples.

Solution to Question 78

Step 1 : Use number bonds to find the total number of coins



8 + 4 = 12

Step 2 : Draw diagrams to find the number of coins each of them gets

12 ÷ 2 = 6

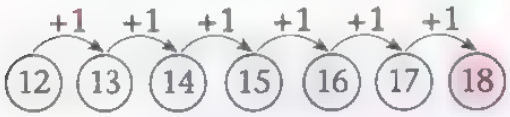
2 groups of 6 = 12

12 ÷ 2 = 6

Each of them gets 6 coins.

Solution to Question 79

Step 1 : Use 'counting on' method to find the total number of eggs



12	+	6	=	18

Step 2 : Draw diagrams and put the 18 eggs into 3 groups

3 groups of 6 = 18

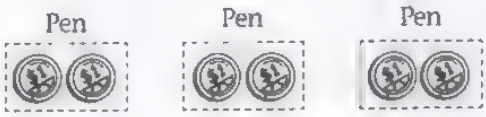
18	÷	3	=	6

There are 6 eggs in each packet.

Solution to Question 80

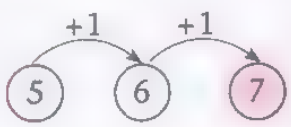
Step 1 : Draw diagrams to find the cost of 1 book and 1 pen

A book costs $5.



A pen costs $2.

Step 2 : Use 'counting on' method to find the total cost of a book and a pen



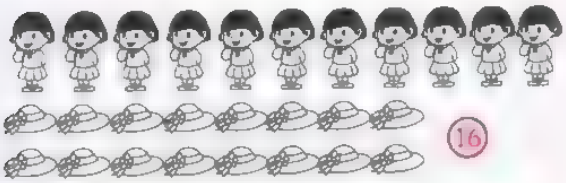
5	+	2	=	7

Peter spends $7 if he buys a book and a pen.

Solution to Question 81

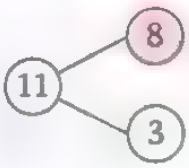
Method 1 :

Draw diagrams to find the total number of hats



Method 2 :

Step 1 : Use number bonds to find the number of children with hats



11 − 3 = 8

Step 2 : Use repeated addition to find the total number of hats

8 × 2 = 16

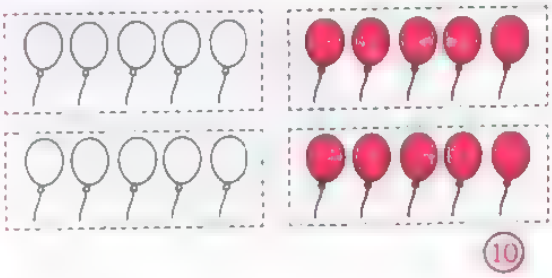
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 16

They have 16 hats altogether.

Solution to Question 82

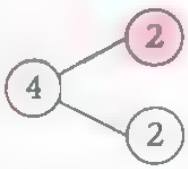
Method 1 :

Draw diagrams to find the number of balloons left



Method 2 :

Step 1 : Use number bonds to find the number of packets of balloons left



4 − 2 = 2

Step 2 : Use repeated addition to find the number of balloons left

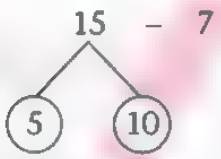
2 × 5 = 10

5 + 5 = 10

She has 10 balloons left.

Solution to Question 83

Step 1 : Use number bonds to find the cost of a chocolate cake



10 – 7 = 3
3 + 5 = 8

15 − 7 = 8

Step 2 : Use repeated addition to find the cost of 2 such chocolate cakes

2 × 8 = 16

8 + 8 = 16

2 such chocolate cakes cost $16.

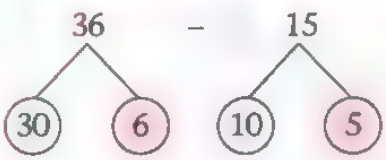
Solution to Question 84

Step 1 : Use repeated addition to find the total number of oranges

4 × 9 = 36

9 + 9 + 9 + 9 = 36

Step 2 : Use number bonds to find the total number of oranges left



6 – 5 = 1
30 – 10 = 20
1 + 20 = 21

36 − 15 = 21

He has 21 oranges left.

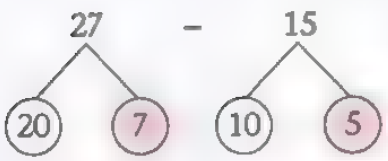
Solution to Question 85

Step 1 : Use repeated addition to find the cost of 3 stalks of roses

$3 \times 5 = 15$

$5 + 5 + 5 = 15$

Step 2 : Use number bonds to find the amount of money she has collected from selling the orchids



$7 - 5 = 2$
$20 - 10 = 10$
$2 + 10 = 12$

$27 - 15 = 12$

She collects $12 from selling the orchids.

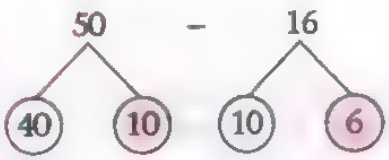
Solution to Question 86

Step 1 : Use repeated addition to find the total cost of 2 chairs

$2 \times 8 = 16$

$8 + 8 = 16$

Step 2 : Use number bonds to find the cost of the table



$10 - 6 = 4$
$40 - 10 = 30$
$4 + 30 = 34$

$50 - 16 = 34$

The cost of the table is $34.

Solution to Question 87

Method 1 :

Draw diagrams to find the number of buns left

Method 2 :

Step 1 : Subtract the number of buns eaten by each child

$5 - 2 = 3$

Step 2 : Use repeated addition to find the number of buns left

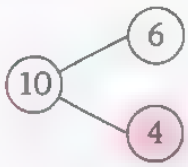
$3 \times 4 = 12$

$3 + 3 + 3 + 3 = 12$

There are 12 buns left.

Solution to Question 88

Step 1 : Use number bonds to find the number of boxes of egg tarts she has left



$10 - 6 = 4$

Step 2 : Use repeated addition to find the number of egg tarts she has left

$4 \times 4 = 16$

$4 + 4 + 4 + 4 = 16$

Mrs Taylor has 16 egg tarts left.

Solution to Question 89

Step 1 : Use repeated addition to find the total number of balloons

$7 \times 3 = 21$

$3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$

Step 2 : Use number bonds to find the number of blue balloons

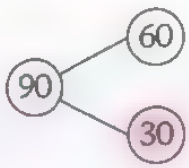
$10 - 5 = 5$
$11 - 10 = 1$
$5 + 1 = 6$

$21 - 15 = 6$

There are 6 blue balloons.

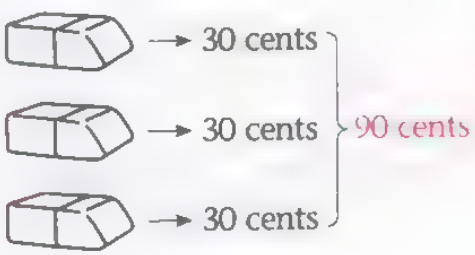
Solution to Question 90

Step 1 : Use number bonds to find the cost of an eraser



$90 - 60 = 30$

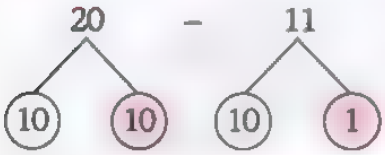
Step 2 : Draw diagrams to find the cost of 3 erasers



He has to pay 90 cents for 3 erasers.

Solution to Question 91

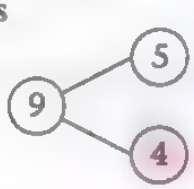
Step 1 : Use number bonds to find the amount of change he gets



$10 - 1 = 9$
$10 - 10 = 0$
$9 + 0 = 9$

20 − 11 = 9

Step 2 : Use number bonds to find the amount of money in two-dollar notes



9 − 5 = 4

Step 3 : Draw diagrams to find the number of two-dollar notes

$4 \div 2 = 2$

The cashier gives him 2 two-dollar notes.

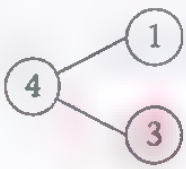
Solution to Question 92

Step 1 : Draw diagrams to find the number of buns in one bag

$12 \div 3 = 4$

There are 4 buns in each bag.

Step 2 : Use number bonds to find the number of butter buns in each bag



4 − 1 = 3

There are 3 butter buns in each bag.

Solution to Question 93

Step 1 : Draw diagrams to find how many more apples Mary has than George

Mary

George

12 – 6 = 6

Step 2 : Divide to find how many apples Mary has to give to George

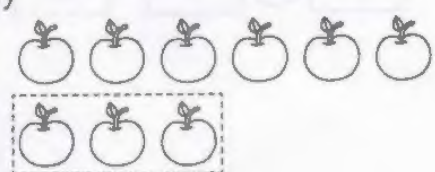
2 × 3 = 6

2 groups of 3 = 6

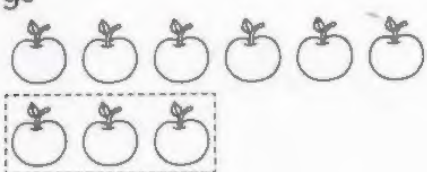
6	÷	2	=	3

Step 3 : Draw diagrams to check if the answer is correct

Mary



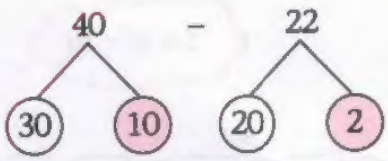
George



Mary must give George 3 apples.

Solution to Question 94

Step 1 : Use number bonds to find how many more stickers Daniel has than Kate



10 – 2 = 8
30 – 20 = 10
8 + 10 = 18

40	–	22	=	18

Step 2 : Divide to find how many stickers Daniel has to give to Kate

2 × 9 = 18

2 groups of 9 = 18

18	÷	2	=	9

He must give Kate 9 stickers.

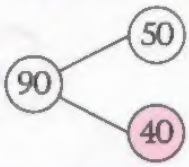
Solution to Question 95

Step 1 : Use repeated addition to find the amount of money in ten-cent coins

$5 \times 10 = 50$

10 + 10 + 10 + 10 + 10 = 50

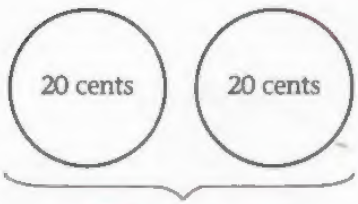
Step 2 : Use number bonds to find the amount of money in twenty-cent coins



90 − 50 = 40

Step 3 : Draw diagrams to find the number of twenty-cent coins

$20 \times 2 = 40$



2 (20 cents) = 40 cents

He has 2 twenty-cent coins.

Solution to Question 96

Step 1 : Draw diagrams to find the number of marbles in one group

$5 \times 4 = 20$

4 groups of 5 = 20

20 ÷ 4 = 5

Step 2 : Use repeated addition to find the number of marbles in 2 such groups

$2 \times 5 = 10$

5 + 5 = 10

There are 10 marbles in 2 such groups.

Solution to Question 97

Step 1 : Draw diagrams to find the number of bags of oranges Mrs Cook can buy

$15 \div 3 = 5$

5 groups of 3 = 15

Step 2 : Use repeated addition to find the number of oranges

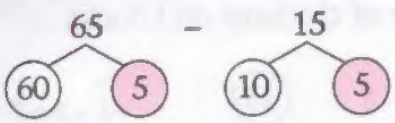
$6 \times 5 = 30$

6	+	6	+	6	+	6	+	6	=	30

She can buy 30 oranges altogether.

Solution to Question 98

(a) Use number bonds find the number of cookies she has at first

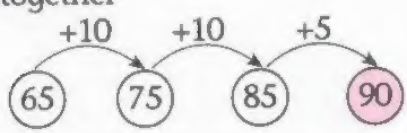


$5 - 5 = 0$
$60 - 10 = 50$
$0 + 50 = 50$

65	−	15	=	50

(a) She has 50 cookies at first.

(b) Use 'counting on' method to find the number of cookies she has altogether

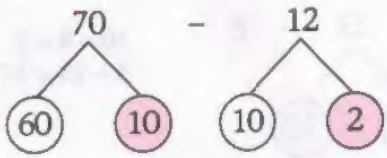


65	+	25	=	90

(b) She has 90 cookies altogether.

Solution to Question 99

(a) Use number bonds to find how much more he has spent than saved

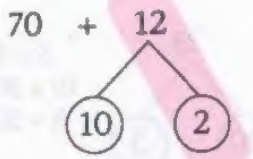


$10 - 2 = 8$
$60 - 10 = 50$
$8 + 50 = 58$

70	−	12	=	58

(a) He spends $58 more than he saves.

(b) Use number bonds to find the amount of money he has at first



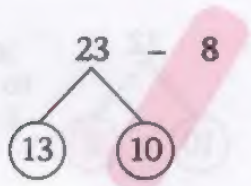
$70 + 10 = 80$
$2 + 80 = 82$

70	+	12	=	82

(b) He has $82 at first.

Solution to Question 100

(a) Use number bonds to find the cost of the bowl

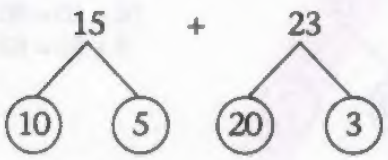


10 − 8 = 2
2 + 13 = 15

23	−	8	=	15

(a) The bowl costs $\$\underline{15}$.

(b) Use number bonds to find the total cost of the plate and the bowl



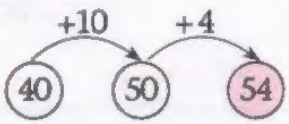
5 + 3 = 8
10 + 20 = 30
8 + 30 = 38

15	+	23	=	38

(b) The total cost of the plate and the bowl is $\$\underline{38}$.

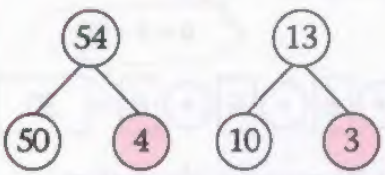
Solution to Question 101

(a) Step 1 : Use 'counting on' method to find the total number of chickens



40	+	14	=	54

Step 2 : Use number bonds to find how many more chickens than ducks there are

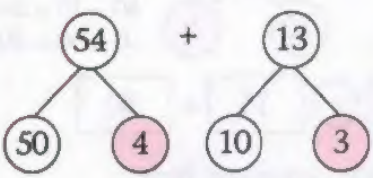


4 − 3 = 1
50 − 10 = 40
1 + 40 = 41

54	−	13	=	41

(a) There are $\underline{41}$ more chickens than ducks on the farm.

(b) Use number bonds to find the total number of chickens and ducks



4 + 3 = 7
50 + 10 = 60
7 + 60 = 67

54	+	13	=	67

(b) There are $\underline{67}$ chickens and ducks altogether.